

Relationship Between Nutrition and Psychology

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Abstract: Nutrition and mental health are related to each other and relationship between them is called nutritional psychology. Mediterranean or traditional diet is good to maintain mental health. High sugar, saturated fat, and ultra-processed food should be avoided to maintain mental health. Foods can boost our moods. Psychological factors like stress, mood, eating disorder can affect food habit and food choices. Good food is more important than tasty food and healthy food to maintain good mental health.

Keywords: Nutrition, Mental health, Nutritional psychology, Mediterranean diet, High sugar, Saturated fat, Processed food, Psychological factor, Food habit, Food.

1. Introduction

In modern life our food preferences, food habits are changing day by day due to our busy life and we take more processed foods every day because these are available easily in the market rather than fresh fruits, vegetables, fish, meat which are best to improve our mental health.

2. Nutritional Psychology

Nutritional psychology defines relationship between mental health and nutrition comes from diet. Psychologists pay attention on the mental health, behaviour and mental illness but not on the nutrition. Nutritionists and dietitians pay attention on the diet and nutrition but not on the mental health. But nutrition and psychology both have deep relationship with each other. The aim of the nutritional psychology is to aware people and support their mental health for making their sense to choose correct food to get proper nutrition.

3. Good and Bad Impact of Food on Mental Health

1) Studies have shown “healthy” diet consumption is a treatment of depression. Now-a-days depression among adults is becoming increased due to the changes of diet pattern and diet. Human brain requires antioxidant to fight against oxidative stress which can leads to destroy or irritate the brain cells that is linked to depression. Fruits, veg, legumes, whole grain, nuts, provide antioxidants to protect out brain cells. Researches have shown people who intake higher amount of fruits and vegetables they have experienced less psychological distress and depressive symptom. Mediterranean diets or traditional diets contain fruits, vegetables, fishes, whole grains, meats, dairy products. Many unprocessed foods are fermented they act as

probiotics.

Omega 3 role – Omega 3 has an important role in maintaining the mental health. It has anti-inflammatory properties and it helps in dopamine and serotonin transmission. Omega 3 is important for brain development and functioning.

Some foods contain anti-depressant nutrients those foods are Salmon, Spinach, Cauliflower, Lettuce, Strawberries etc.

2) High sugar and saturated fat are responsible for Depressive symptom, anxiety and metabolic changes. High sugar and saturated fats lead to inflammation in the nucleus accumbens which is a part of brain which controls moods and feelings. High sugar might leads to increase incident mood disorder in men and recurrent mood disorder in men and women both. Studies have shown that high sugar and saturated fat related to anxiety over age 60. Ultra processed foods have calories and responsible for weight gain. Processed foods compete with nutrients rich foods and block their good effects on mental health and processed foods initiate low level inflammation in brain cells.

4. Foods and Moods (Hormones and Digestive System)

The function of digestive system is not only the digestion of the foods but also maintain our emotions. Serotonin is a neurotransmitter helps in regulating moods, appetite, sleep. 95% of serotonin is produced from the gastrointestinal tract, lined with nerve cells and neurons.

There are some good bacteria that help in maintaining the functions of nerve cells and serotonin production. They reduce the chances of inflammation. Serotonin improves the absorption of food nutrients and induces neural pathway that travels between gut and brain. Studies have shown probiotics have good bacteria which improves mental illness, stress, anxiety.

How to improve mood by foods:

- 1) Accept whole foods, avoid processed foods.
- 2) Intake fresh fruits and vegetables.
- 3) Eat enough fibres and legumes.
- 4) Take fermented food, it contains good bacteria.
- 5) Reduce high sugar and saturated fat intake.

Physiological factors affect food habits-

1) *Stress:* Now-a-days stress is very common in developing countries and in modern life. Due to stress food habits and food choices have been changed. The effects of stress are very different among individuals. Some people eat more and they are

more prone to be obese and people who eat less than their requirement they have the risk of malnutrition. Due to the stress people forget to control their weight and sometimes appetite is reduced. If stress is seen then healthy diet should be taken to improve mental stress.

2) *Mood*: Once upon a time people did not think that foods can be a tool to modify the mood. But now-a-days food is recognised as a tool which influence the mood and mood also influence the food choices. Many people cannot eat foods according to their mood because they are conscious about their weight. Sometimes delicious foods and palatability of food modify the mood. Sometimes restriction of some foods can increase the desire for those foods and it leads to food craving. Depressed mood related to food craving. Food habits and food choices are influenced by mood.

3) *Eating disorder*: Many people want to loss their weight and they start extreme dieting and exercise and sometimes start fasting for longer period which is harmful for health. Eating disorder happens in stress, anxiety, unhappiness, obsession. Weight stabilization and psychotherapy are the treatment of eating disorder.

Other factors:

- 1) Poor people do not get nutritious foods and their physical health and environmental factors are not proper to maintain a healthy life. So stress, depression, ruff attitude can be seen among them due to insufficient nutrition.

- 2) Obesity and depression are related to each other. It has been seen that people who are obese have the risk of developing depression and people who are depressed have the risk of becoming obese.
- 3) Children and adolescent who eat fat foods, sugar, soft drinks are having Attention deficit/hyperactivity disorder(ADHD) and on other hand children who do not eat adequate amount of vegetables, fruits, fatty fish, have ADHD symptom. In ADHD hyperactivity, difficulty on paying attention and emotive behaviour can be seen.

5. Conclusion

Our mental health and nutrition both are important for each other to get physiological wellness. Nutritious foods can only serve proper nutrition which improves mental and physical health and should avoid fast food, ultra-processed food because these contain sugar, hydrogenated fat, salt, chemicals which affect the physiological and mental functions and hamper our daily lifestyle.

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